BICIS 1907 CALLE BOARD OF EDUCATION

DISTRICT OF COLUMBIA

# Courses of Study

IN THE

# HIGH AND MANUAL TRAINING SCHOOLS

WASHINGTON, D. C.

NORMAN T. ELLIOTT PRINTING COMPANY.

copy 2.

LB1615 .W3 A5 1907 copy2

By transfer FEB 25 1908

# HIGH and MANUAL TRAINING COURSES

# ACADEMIC COURSE

### LOCATIONS OF BUILDINGS

CENTRAL HIGH SCHOOL .- Seventh and O streets northwest.

EASTERN HIGH SCHOOL.—Seventh and C streets southeast.

WESTERN HIGH SCHOOL .- Thirty-fifth and T streets northwest.

BUSINESS HIGH SCHOOL.—Ninth street and Rhode Island avenue northwest.

McKinley Manual Training School.—Seventh and Rhode Island avenue northwest.

M STREET HIGH SCHOOL.—M street, between First street and New Jersey avenue northwest.

ARMSTRONG MANUAL TRAINING SCHOOL.—P street between First and Third streets northwest.

### TERMS OF ADMISSION

Pupils in the eighth grades of public schools are admitted to the high and manual training schools on the certificate of their eighth grade teachers.

Entrance examinations are given only to pupils from other than the public schools of the District of Columbia. Proficiency in each of the above-named branches is required.

Entrance examinations are held at the beginning of school in September of each year. All candidates for entrance are requested to confer with one of the members of the Board of Examiners at the Central High School, on Thursday, Friday or Saturday of the week preceding the opening of the public schools, between 9 a. m. and 12 m., and 2.30 and 4.30 p. m.

# · COURSES OF STUDY IN THE ACADEMIC HIGH SCHOOLS 1907—1908.

HISTORY	English 1-5 Algebra-s History (Auc )-4 Elect one Latin 1-5 German 1-5	English II-4 History (Med.)-4 Pl. Geometry 4 Elect one Latin II-5 German II-5	English III-4 History (Mod )-4 Civics and Economics Elect one [Latin III-4 German III-4 German II-5 French I-5	English IV-4  American History-4  Elect one from each group  Latin IV-4  German II or IV-5 or 4  French II or IV-5 or 4  Physics I-5  Chemistry I-5  Biology I 5
MODERN LANGUAGE	Buglish 1-5 Algebia-5 History (Auc.)-4 German 1-5	Biglish II-4 Pl. Geometry-4 German II-5 Elect one French I-5 Physics I-5 Chemistry I-5 Biology I-5	English III-4 Prench II-5 or Physics II-5 or Chemistry II-5 or Biology II-5 German III-4 A French I-5 Latin I-5 Spauish I-5 Solid Geom, and Trig5	English IV-4  Elect three from different groups German IV-4 French III-4  French III-5  French II 5  Latin II 5  Spanish II-5  College Algebra and Analytical Geometry-5  Physics I-5  Chemistry I-5  Biology I-5
SCIENTIFIC	English 1-5 Algebra5 Physical Geography-4 Elect one Latin, 1-5 German 1-5	English II-4 Pl. Geometry-4 Elect one from each group   Latin II-5   German II-5   Physics I-5   Chemistry I-5   Biology I-5	English III-4  Elect two from following group Physics I or II-5 Chemistry I or II-5 Kathematics III-5 Elect one from following group Latin I or III-5 or 4 German I or III-5 or 4 Freuch I-5 History (Modern)-4 Mathematics III-5 Mathematics III-5	English IV-4  Elect two from following group Plysics I or II-5 Chemistry I or II-5 Mathematics IV-5 Elect one from following group Latin II or IV-5 or 4 Gerunan II or IV-5 or 4 French II-5 History (Amer.)-4 Mathematics IV-5 Mathematics IV-5
CLASSICAL	English I 5 Algebra 5 History (Anc.)-4 Latin 1-5	Baglish II-4 Latin II 5 Pl Geometry-4 Elect nne Greek I-5 German I-5 French I-5	English III 4 Latin III-5 or 4 Elect two from different groups Greek II-5 German II-5 German II-5 German II-5 German II-5 Sermeh II-5 Solid Geom and Trig. 5	English IV-4 Latin IV-5 or 4 Elect two from different groups  { Greek III-5 German III-4 French III 4
	1st Year	2d Year	3d Year	4th Year

### NOTES.

A major study is one to which is regularly assigned at least four periods of school time per week.

Candidates for diplomas must pursue four major subjects in each year, including all the prescribed studies. Under certain conditions, three major subjects in the fourth year may be accepted for graduation. Students who from any cause fail to meet these requirements, are enrolled as "unclassified," and cannot graduate until the prescribed work is satisfactorily made up.

One year of science is required of every pupil.

If only three years of foreign language work be taken, one and the same language must be taken continuously.

Physical culture is prescribed for all pupils.

Spelling is prescribed for all pupils in the first and second years as a part of the English course.

Drawing.one hour per week is required of all pupils in the first and second years. It is required of all Normal candidates through the four years.

Pupils in the third and fourth year may be permitted to substitute major drawing, eight hours per week, for some other elective subject, exclusive of the required year of science. Such arrangement will be made by the principal only upon the presentation of good and sufficient reason, all such courses must be planned in detail.

Mechanical Drawing is required of all pupils taking third year mathematics.

A review course in arithmetic, as a minor elective, two hours weekly will be open to fourth year pupils.

Any subject newly elected in the third year must be continued through the fourth.

Pupils desiring two years of work in physics, chemistry or biology must take that subject during the second and third years.

Choral work in music is prescribed for all pupils. Pupils intending to enter the Normal School are required to take music throughout the course. COLLEGE PREPARATION.—Every student preparing for college should make an early decision in regard to the college he desires to enter, and, under the advice of the principal, make proper selection of the required studies. Pupils preparing for institutions requiring certain definite subjects may, with the written approval of the principal, substitute other than the offered electives in the third and fourth years.

The Classical Course prepares pupils for Classical Courses in college. The Classical and Scientific Courses prepare pupils for scientific courses in college. The Scientific course prepares for advanced technical schools and colleges.

Pupils in the Classical Course who are preparing for engineering courses in college should substitute Physics I and II for Latin . III and IV.

Suggestions to Parents.—The aim in offering the accompanying courses in the Washington High Schools has been to group certain studies, pursuit of which shall give a training as effective and well-balanced as is possible in any high school course. The majority of the pupils who complete the work of the high schools end their school training with graduation. It is therefore essential that each mind be as well trained for its work as possible. To this end each course offered attempts to combine the elements of broad culture with a group of studies suited to the peculiar qualities of individual minds. Thus, four years of English, two of mathematics, two of foreign language, either ancient or modern, one of an elementary science (except for the few whose college preparation may demand Greek instead of science) drawing, and music are required of all pupils in Academic Schools.

Throughout the third and fourth years the serval courses offer opportunities of development along lines of personal aptitude.

The basis of the Classical Course is English, Latin, and Greek or German or French. This course offers a training in the classics with an election of one of two modern languages, advanced mathematics, or mathematics and science. The last named combination is recommended to all pupils taking the Classical Course, unless they be candidates for admission to colleges which demand other work.

The basis of the Scientific Course is English, mathematics, and science. It offers an opportunity of contining the language begun in the first year, either ancient or modern, or the substituting therefor of two years of a modern language.

The basis of the Modern Language Course is English and German, with the choice of another language, French or Spanish, in the last two years.

The basis of the History Course is English and history with a foreign language, either ancient or modern, with the choice of a modern language, either German or French, in the last two years.

### TEXT BOOKS AUTHORIZED FOR USE.

### IN THE FIRST YEAR CLASS.

A'gebra: Wentworth's New School Algebra, \$1.12. English: Manual of Composition and Rhetoric, Gardiner, Kittredge and Arnold, \$1.00 (ex. 78 cts). Selections (may be procured as needed). Geography: Dryer, Lessons in Physical Geography, \$1.20. German: Spanhoofd's Lehrbuch der deutschen Sprache, \$1.00. History: The Ancient World, West, \$1.50. Latin: Collar & Daniell's First Year Latin, \$1.00. Allen & Greenough's Grammar (revised) \$1.20. Pearson's Essentials of Latin, 90 cts. (ex. 68 cts). Ingliss & Prettyman's First Latin Book, 90 cts. Ritche's Fabulae Faciles, 75 cts. The Advanced Rational Speller, Daly, 25 cts. The Laurel Song Book, \$1.00.

### IN THE SECOND YEAR CLASS

Chemistry: Remsen's Introduction to the Study of Chemistry, \$1.12. English: Gardiner, Kittredge and Arnold, Manual of Composition and Rhetoric \$1.00 (ex. 78 cts). Selections (procured as needed). French: Gibert, Elementary French Reader, 30 cts. Ce qu'on voit, de Pompéry, 20 cts. Snow & Lebon, Easy French, 60 cts. Joynes, Minimum French Grammar and Reader, 75 cts. Geometry: Wentworth's Plane and Solid (Revised), \$1.25. Geometrical Exercises, 12 cts. German: Spanhoofd's Lehrbuch. Kleine Geschichten für Aufanger (Appleton), 45 cts. Benedix, "Nein," 25 cts. Seidel's "Leberecht Huhnchen," 30cts. Hohlfeld's Deutsches Liederbuch, 60 cts. Greek: Goodwin's Greek Grammar (Edition of '92), \$1.50. White's First Greek Book, \$1.25. Latin: Daniell's New Latin Composition, \$1.00. Collar and Daniell's First Year Latin, \$1.00. Cæsar's Gallic War, (Allen and Greenough, \$1.25. Gunnison and Harley, \$1.25, exchange price, 90 cts). Mann and Twiss Physics, \$1.25 (ex. 95 cts.) The Advanced Rational Speller, Daly, 25 cts. The Laurel Song Book, \$1.00.

### IN THE THIRD YEAR CLASS.

Biology: Wilkin's Inductive Biology, 75 cts. Animal Studies, \$1.25. Chemistry: Remsen's Introduction to the Study of Chemistry, \$1.12. Civil Government: Bryce's American Commonwealth, \$1.60. English: Chancer, Milton, Shakespeare. Macaulay's Essay on Milton. Halleck's History of English Literature, \$1.25, (ex. 95 cts). French: Joynes' Minimum French Grammar and Reader, 75 cts. Erckmann-Chatrian, Madame Therese, 50 cts. Gibert's Elementary French Reader, 30 cts. Snow and Lebon's Easy French, 60 cts. \*Heath's English-French and French-English Dictionary, \$1.25. German; Baumbach's "Der Schwiegersohn," 30 cts. Lessing's "Minna von Barnhelm," 50 cts. Hohlfeld's Deutsches Liederbuch, 60 cts. Jagemann's German Syntax, 80 cts. Wesselhoeft's Composition, 40 cts. Newson's German Daily Life, 75 cts. \* Heath's German-English and English-German Dictionary, \$1.10. Greek: Goodwin's Greek Grammar, \$1.50. Goodwin and White's Xenophon's Anabasis, \$1.50. Collar and Daniell's Greek Prose Composition, 90 cts. Robinson's History of Western Europe, \$1.60. Latin: Select Orations of Cicero, Tunstall's (Revised), \$1.20, or Allen & Greenough's New Edition, \$1.40. Daniell's New Latin Composition, \$1.00. matics: Solid Geometry, Wentworth's Plane and Solid (Revised) \$1.25. Trigonometry and Surveying, Wentworth's (with tables) Second Revised Edition, \$1.35. Physics: Hall and Bergen's A Text Book of Physics, Revised, \$1.25. Lodge's Mechanics, \$1.35. Political Economy, Bulloch, Introduction to Economics, \$1.28. Spanish: Introduccion a la lengua Castellana, De Gareunes and Marion, 90 cts. El final de Norma, Alarcon, 75 cts. The Laurel Song Book, \$1.00.

\* Recommended for purchase.

### IN THE FOURTH YEAR CLASS.

Arithmetic: Beman & Smith, Higher Arithmetic, 80 cts. Botany: Bergen's Foundations of Botany (without Flora) \$1.20. Coulter's Plant Studies, \$1.25. English: (References may be procured as needed.) Halleck's History of English Literature, \$1.25 (ex. 95 cts). French: Fontaine' Livre de Lecture et de Conversation, with Vocabulary, 90 cts. Dictionnaire Petit Larousse, Illustre, \$1.25. Theuriet, Bigarreau, 25 cts. Joynes' Minimum French Grammar and

Reader, 75 cts. Erckmann-Chatrian, Madame Therese, 50 cts. German: Schiller's "William Tell" (Sachtleben's Edition), 50 cts. Goethe's "Iphigenie," 60 cts. Goethe's, Hermann and Dorothea, 60 cts. Lehmann's Literaturgeschichte, 40 cts. Jagemann's Syntax, 80 cts. Wesselhoeft's Composition, 40 cts. Hohlfeld's Deutsches Liederbuch, 60 cts. Newson's German Daily Life, 75 cts. Greek: Benner's Homer's Iliad, \$1.60. Goodwin's Greek Grammar, \$1.50. Goodwin's Greek Reader, \$1.50. Collar and Daniell's Beginner's Greek Prose Composition, 90 cts. Pearson's Greek Prose Composition, 90 cts. Liddell and Scott's Greek-English Lexicon (abridged), \$1.25. History: McLaughlin's A History of the American Nation, \$1.40. Latin: Virgil's Aeneid, Greenough and Kittredge, \$1.50. Mather and Wheeler's Latin Prose Composition, \$1.00 (college class only), Burgess, Drill Vocabulary for Virgil, 30 cts. Mathematics: College Algebra, Wentworth's, First Edition, \$1.50. Analytical Geometry, Wentworth's, \$1.25. Spanish: Marianela, Galdos, 75 cts. Temprano y consol, Bazan, 35 cts. Despues de la lluvia, edition Cortina, 25 cts. Giese's First Book in Spanish, \$1.20. Zoology: Kellogg's Elementary Zoology, \$1.20. The Laurel Song Book, \$1.00.

## COURSES OF STUDY

### BUSINESS HIGH SCHOOL

### WASHINGTON, D. C.

TWO-YEAR COURSE.		FOUR-YEAR COURSE.	
FIRST YEAR.		FIRST YEAR.	
Elementary Bookkeeping an	d	Elementary Bookkeeping and	
Business Practice	5	Business Practice	5
Business Arithmetic	4	Business Arithmetic	4
English	4	English	4
Shorthand	4	French, German or Spanish or	5
Physical Geography	3	Physical Geography	3
Penmanship	1	Penmanship	1
Drawing, Freehand or Com-	-	Drawing, Freehand or Com-	
mercial	1	mercial	I
Typewriting	I	_	_
			23
	23		,
SECOND YEAR.		SECOND YEAR.	
Advanced Bookkeeping or		Advanced Bookkeeping	6
Shorthand	6	Biology and Commercial Pro-	
Applied and Interpretive		ducts	5
Arithmetic	3	Applied and Interpretive	
English	4	Arithmetic	3
Commercial Law	3	English or French, German or	
Commercial Geography	3	Spanish	4
Typewriting	4	Commercial Geography	3
		Penmanship	I
	23	_	
			22

### THIRD YEAR.

Algebra and Inventional Geometry 4 Accounting, Auditing and Finance or Shorthand (Beginners') 4 English 3 French, German or Spanish 4 Elementary and Industrial Physics 4 Commercial and Industrial History 3 22 Shorthand (Elective, Continuation class for Shorthand pupils transferring from two-vear course.) 2 FOURTH YEAR. Business Organization and Management 4 English 3 French, German or Spanish 3 Government and Industrial Problems 2 Commercial Law 3 Typewriting 4 Advanced Shorthand and Office Training or Geometry or Elementary and In-

dustrial Chemistry

Pupils may transfer from the two-year course to the four-year course at the end of the first year, without condition.

Pupils transferring to the fouryear course, on completion of the second year of the short course, must take extra work in language or Science in place of Beginners' shorthand, law (fourth year), and possibly some typewriting.

While the total of recitations per week is heavy, it should be remembered that a portion of the work requires no home preparation.

5

# NOTES ON COURSES FOR THE BUSINESS HIGH SCHOOL.

- A diploma will be given on completion of the four-year course;
   a certificate, on completion of the two-year course.
- 2. Drawing will be required the first year and will be elective other years.
- Music or public speaking will be required of all pupils in each
  year.
- 4. Physical training will be required of all pupils in each year.
- 5. In the first and second years, an additional hour per week will be given to oral reading and spelling.
- 6. A foreign language begun in first or second year must be continued for at least three years.
- 7. A pupil may elect back more than one year, only by consent of the Prinipal.

# TEXT BOOKS AUTHORIZED FOR USE IN THE BUSINESS HIGH SCHOOL.

FIR	CT	77 L	ΛD

	Bookkeeping: Snyder and Thurston's Bookkeeping,	\$1.25
	Business High School Bookkeeping Set,	.50
	Business High School Practice Blanks,	.40
	Business Arithmetic: Moore's New Commerical Arithmetic,	1.00
	(Exchange price, 76 cents).	
	English: Manual of Composition, Gardiner, Kittredge and	
	Arnold. (Exchange price, 78 cents).	00.1
	Shorthand: Barnes' Manual, Revised Edition.	.90
	Physical Georgraphy: Dryer's,	1.20
	(Exchange price, 95 cents).	
	Spelling: Daly's Rational Speller,	.25
	Dictionary: "Everybody's,"	.35
	Foreign Language: Text to be selected.	
	Music: Laurel Song Book,	1.00
SEC	COND YEAR.	
	Bookkeeping: Snyder and Thurston's Bookkeeping,	1.25
	Biology and Commercial Products: Text to be selected.	
	Applied Arithmetic. Thurston's Practical Tests,	.45
	English: Manual of Composition. Gardiner, Kittredge	
	and Arnold,	1.00
	(Exchange price, 78 cents).	
	Commercial Law: Huffcut's Business Law,	1.00
	(Exchange price, 82 cents).	
	Commercial Geography: Adams',	1.30
	Spelling: Daly's Rational Speller,	.25
	Music: Laurel Song Book,	1.00
	•	

### THIRD YEAR.

Text books to be selected.

# MANUAL TRAINING COURSES

### GENERAL SCIENTIFIC COURSE

(Optional subjects are underscored)

FIRST YEAR.		SECOND YEAR.	
	Hrs. per week	I	Hrs. per week
Euglsh,	4	English,	4
Ancient History,	3	Geometry,	4
Algebra,	5	Chemistry,	4
Physics,	4	Physics, or	4
Drawing:		Applied Biology	4
Freehand,	2	Drawing:	
Mechanical,	2	Freehand,	2
Shopwork :	4	Mechanical,	2
Joinery,		Shopwork,	4
Wood Turning,		Foundry,	
Pattern-making		Domestic Science,	2
Domestic Science,	2	Domestic Art,	2
Domestic Art,	2	Dressmaking,	
Plain Sewing,		Military Drill,	4
Dressmaking,		Physical Culture (Girls	s) I
Military Drill,	4	Music.	I
Physical Culture (gir	ls) I		
Music.	I		

### THIRD YEAR.

### FOURTH YEAR.

Hrs	s, per week	Hrs	. per week
English,	4	English,	4
Solid Geometry,		Mathematics,	5
Trigonometry and	4	Applied Electricity,	4
Surveying,		Chemistry, (qualitative)	4
Elementary Steam,	4	German	4
Engineering,	4	or French,	
* Elementary Industrial	4	or renen,	4
Chemistry,	4	Biology,	4
Biology,	4	ababa a a www.	
History of Modern	4	**American History,	4
Europe,	4	Mechanical Drawing,	6
German,	4	or Freehand Drawing,	6
or French,	4	Domestic Science,	6
Mechanical Drawing or	6	or Domestic Art,	6
Freehand Drawing,	6	Shopwork,	8
Drawing:		Drawing:	
Freehand,	2	Freehand,	2
Mechanical.	2	or Mechanical,	2
Shopwork,	4	Shopwork,	4
Machine Shop,		Machine Shop,	
Domestic Science,	2	Domestic Science	2
Domestic Art,	4	or Domestic Art,	4
Military Drill	4	Military Drill,	4
Physical Culture (Girl)	1	Physical Culture (Girls)	τ
Music.	I	Music.	I
(Four major subject requ	uired).	(Four major subjects re	quired.)

<sup>\*</sup> Boys and girls separately; the work of the former bearing on the simpler manufacturing processes, and that of the latter on domestic science and domestic art.

<sup>\*\*</sup> With special emphasis on industrial development.

### TECHNICAL PREPARATORY COURSE.

(Optional subjects are underscored)

FIRST YEAR.		SECOND YEAR.	
	Hrs, per week	I	Hrs. per week
English,	4	English,	4
Algebra,	5	Geometry,	4
German,	5	German,	4
Drawing:		Physics I	4
Freehand	2	Drawing:	
Mechanical,	2	Freehand,	2
Shopwork,	4	Mechanical,	2
Joinery,		Shopwork,	. 4
Wood Turning,	•	Forging,	
Pattern Making,		Domestic Science	2
Domestic Science,	2	Domestic Art,	2
Domestic Art,	2	Dressmaking,	
Plain Sewing,		Military Drill,	4
Military Drill,	4	Physical Culture (Girls	s) 1
Physical Culture (Girl	ls) I	Music.	ı
Music.	1		

### THIRD YEAR.

### FOUR YEAR.

Hrs.	per week		per week
English,	4	English,	4
Chemistry,	4	* American History,	4
Solid Geometry,		College Algebra and	
Trigonometry and	4	Analytics,	5
Surveying,		+ Applied Electricity,	4
Physics II,	4	†† Elementary Industrial	
Biology,	4	Chemistry,	4
German,	4	Biology,	4
French,	4	German, ·	4
History,	4	French,	4
Drawing,			
Freehand,	2	Mechanical Drawing or	6
Mechanical,	2	Freehand Drawing	6
Shopwork,	4		
Machine Shop,		Domestic Science,	6
Domestic Science,	2	or Domestic Art,	6
Domestic Art,	4		
Military Drill,	4	Drawing,	
Physical Culture (Girls)	I	Freehand,	2
Music.	I	Mechanical,	2
		Shopwork,	4
		Machine Shop,	
		Domestic Science,	2
		Domestic Art,	4 _
		Military Drill,	4
		Physicial Culture (Girls)	I
		Music.	I

<sup>\*</sup>Required in either third or fouth year of pupils going to higher institutions.

<sup>†</sup> Open only to those who have had two years of Physics.

<sup>††</sup> Boys and girls separately; the work of the former bearing on the simpler manufacturing processes and that of the latter on Domestic Science and Domestic Art.

### SPECIAL TECHNICAL COURSE

(Optional subjects are underscored.)

FIRST YEAR.		SECOND YEAR.	
,	Hrs. per week		Hrs. per week
English,	4	English,	4
Mathematics,	4	History,	4
Physics,	4	Chemistry,	4
Drawing:		Drawing:	
Freehand,	2	Freehand,	2
Mechanical,	2	Mechanical	2
Shopwork .	8	Shopwork,	8
Joinery,	)	Machine Shop	8
Wood Turning,	} 4	or Machine Shop	4
Pattern Making,	j .	and Wood Turnin	g 4
Forging,	4	or Forging,	4
Domestic Science,	4		
Domestic Art,	4	Domestic Science,	4
Plain Sewing,		Domestic Art,	4
Dressmaking,		Military Drill,	
Military Drill,	-4		

Note.—A certificate, but not a diploma, will be granted upon completion of this course.

### TEXT BOOKS AUTHORIZED FOR USE

# MCKINLEY AND ARMSTRONG MANUAL TRAINING SCHOOL.

- FIRST YEAR—Algebra: Wentworth's New School Algebra, \$1.12.

  Arithemetic. Moore's New Commercial Arithmetic, \$1.10.

  English. Gardiner, Kittredge and Arnold's Manual of Composition and Rhetoric, \$1.00 (Exchange price, 78 cts.) German.

  Spanhoofd's Lehrbuch, \$1.10. History. West's Ancient World \$1.50. Physics. Henderson and Woodhull's Elementary Physics and Experiments, \$1.10 or Mann and Twiss' Physics, \$1.25. The Laurel Song Book, \$1.00.
- SECOND YEAR.—Chemistry. Remsen's Introduction to the Study of Chemistry, \$1.12. English. Gardiner, Kittredge and Arnold's Manual of Composition and Rhetoric, \$1.00 (Exchange price, 78 cts. Geometry. Schultze and Sevenoak's Plane and Solid Geometry, \$1.10. German. Spanhoofd's Lehrbuch, \$1.00 Spanhoofd's Kleine Geschichten fur Anfanger (Appleton) 40 cts. Benedix "Nein," \$1.25. Seidel's "Leberecht Huhnchen," 30 cts. Hohlfeld's Duetsche Liederbuch, 60 cts. History. Cheyney's Short History of England, \$1.40. Physics. Hall and Bergen's "A Text Book on Physics," Revised, \$1.25 (For second year students of Physics.) Henderson and Woodhull's Elementary Physics and Experiments, \$1.10, or Mann and Twiss' Physics, \$1.25 (For first year students of Physics.) Gilley's Physics, \$1.30. Music. The Laurel Song Book, \$1.00.
- THIRD YEAR.—Biology. Wilkin's Inductive Biology, 75 cts. Jordan et al. Animal Studies, \$1.25. Chemistry. Remsen's Introduction to the Study of Chemistry, \$1.12. English. Halleck's History of English Literature, \$1.25 (Exchange price, 95 cts.) French. Fontaine's Livre de Lecture et de Conversation, 90 cts. Gibert's Elementary French Reader, 30 cts. Snow and Lebon's

Easy French, 60 cts. Joyne's Minimum French Grammar and Reader, 75 cts. Dictionnaire Larousse, \$1.00. German. "Der Schwiegersohn," 30 cts. Lessing's "Minna von Barnhelm," 50 cts. Hohlfeld's Duetsche Liederbuch, 60 cts. Jagemann's German Syntax, 80 cts. Wesselhoeft's German Composition 40 cts. Newson's German Daily Life, 75 cts. Heath's German-English and English-German Dictionary, \$1.10. Gore's German Scientific Reader, 75 cts. Dippold's German Scientific Reader, 75 cts. Dippold's German Scientific Reader, \$1.60. Mathematics. Schultze and Sevenoak's Plane and Solid Geometry, \$1.10. Wentworth's Trigonometry and Surveying (with tables) Second Revised Edition, \$1.35. Physics. Hall and Bergen's (Revised) \$1.25. Leaflets on Steam Boilers and Engines.

FOURTH YEAR .- Botany, Bergen's Foundations of Botany (with Flora) \$1.25. Coulter's Plant studies, \$1.25. English. Halleck's History of English Literature, \$1,25 (Exchange price, 95 cts. French. Fontaine's Livre de Lecture et de Conversation, with Vocabulary, 90 cts. Joyne's Minimum French Grammar and Reader, 75 cts. Chatrain's Madame Therese, 50 cts. Theuriet's Bigarraeau, 25 cts. Dictionnaire Larousse, \$1.00. German. Schiller's "Wilhelm Tell," 50 cts. Goethe's Iphigenie, 60 cts. Jagemann's German Syntax, 80 cts. Wesselhoeft's German Composition, 40 cts. Newson's German Daily Life, 75 cts. Hohlfeld's Deutsche Liederbuch, 60 cts. Gore's German Scientific Reader, 75 cts. Dippold's German Scientific Reader, 75 cts. History. McLanghlin's "A History of the American Nation," \$1.40. Mathematics. Beman and Smith's Higher Arithmetic, So cts. Wentworth's College Algebra (First Edition) \$1.50. Wentworth's Analytical Geometry, \$1.25 Physics. Thompson's Elementary Lessons in Electricity and Magnetism, \$1.40. Loney's Mechanics and Hydrostatics, \$1.25. Music. The Laurel Song Book, \$1.00. Zoology. Kellog's Elementary Zoology, \$1.00.



LIBRARY OF CONGRESS

0 019 745 375 8